

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-3. (Canceled)

4. (Currently Amended) The actuator as claimed in Claim [[3]]10, wherein the slide of the dump valve (8;28) is executed as a piston (12;12';32), which forms sized to form a first (13;13') chamber and a second (17;17') chamber in the sleeve (10), of which the first chamber (13;13') is capable of communicating with the cylinder/piston unit (1) within the dump valve, the first chamber being in fluid communication with the cylinder/piston unit via the first opening (11;11'), the second chamber being in fluid communication with the electric motor/pump unit (3) via and possesses an outlet (15) and the sump, and of which the second chamber (17) communicates with the electric motor/pump unit (3).

5-7. (Canceled)

8. (Currently Amended) The actuator as claimed in Claim [[1]]10, wherein further comprising:

a controller (21) is provided for the control of controlling the electric motor/pump unit (3), the controller receiving which receives a set point value signal corresponding to a desired [[the]] pressure piston/cylinder within the cylinder/piston unit and an actual value signal corresponding to [[the]] an actual pressure piston/cylinder within the cylinder/piston unit as input signals.

9. (Currently Amended) The actuator as claimed in Claim [[1]]10, wherein the spring (14; 14') of the dump valve (8;28) and the spring of the nonreturn valve (9' ; 29') are dimensioned in such a way that, as the pressure of the pressure medium rises, the outlet opening (11) is closed first, and the nonreturn valve (9;29) is opened only once that has taken place the dump valve is biased such that the dump valve moves from the first position to the second position before the nonreturn valve moves from the closed position to the opened position.

10. (New) An actuator for the control of a friction clutch in the drive train of a motor vehicle, the actuator comprising:

a cylinder/piston unit generating a contact pressure for the friction clutch;

a reversible electric motor/pump unit (3) selectively providing a pressure medium; and

a self-regulating valve unit (2) fluidly coupling the cylinder/piston unit and the reversible electric motor/pump unit such that the friction clutch is controlled by actuating the motor/pump unit (3), the self-regulating valve unit (2) having

a dump valve (8;8';28;38) having a sleeve (10;10') and a slide (12;12';32) disposed within the sleeve, the dump valve further having a first opening (11;11') through which pressure medium from the cylinder/piston unit (1) can flow to a sump, the slide (12;12';32) being movable between a first position exposing the first opening (11;11') and a second position concealing the first opening (11;11'), the slide being spring biased in to the first position to permit the flow of pressure medium from the cylinder/piston unit to the sump when the reversible electric motor/pump unit is deactivated, the slide being positionable in the second position in response to positive pressure of the pressure medium from the reversible electric motor/pump unit and positionable in the first position in response to negative pressure of the pressure medium from the reversible electric motor/pump unit; and

a nonreturn valve (9;29) fluidly coupling the cylinder/piston unit and the reversible electric motor/pump unit, the nonreturn valve being movable between a closed position and an opened position, the nonreturn valve being biased in the closed position, the nonreturn valve permitting flow of pressure medium therethrough only from the reversible electric motor/pump unit (3) to the cylinder/piston unit (1) in the opened position.

11. (New) An actuator for the control of a friction clutch in the drive train of a motor vehicle, the actuator comprising:

a cylinder/piston unit generating a contact pressure for the friction clutch;

a reversible electric motor/pump unit (3) selectively providing a pressure medium; and

a self-regulating valve unit (2) fluidly coupling the cylinder/piston unit and the reversible electric motor/pump unit such that the friction clutch is controlled by actuating the motor/pump unit (3), the self-regulating valve unit (2) having

a dump valve (8;8';28;38) having a sleeve (10;10') and a slide (12;12';32) disposed within the sleeve, the sleeve having a first opening (11;11') and the slide having a second opening, the slide (12;12';32) being movable between a first position exposing the first opening (11;11') and permitting pressure medium from the cylinder/piston unit (1) to flow to a sump and a second position aligning the first opening (11;11') and the second opening and permitting pressure medium from the reversible electric motor/pump to flow to the cylinder/piston unit, the slide being spring biased in to the first position to permit the flow of pressure medium from the cylinder/piston unit to the sump when the reversible electric motor/pump unit is deactivated, the slide being positionable in the second position in response to positive pressure of the pressure medium from the reversible electric motor/pump unit and positionable in the first position in response to negative pressure of the pressure medium from the reversible electric motor/pump unit; and

a nonreturn valve (9;29) disposed within the slide and fluidly coupling the cylinder/piston unit and the reversible electric motor/pump unit, the nonreturn valve being movable between a closed position and an opened position, the nonreturn valve being biased in the closed position, the nonreturn valve permitting flow of pressure medium therethrough only from the reversible electric motor/pump unit (3) to the cylinder/piston unit (1) via the first opening and the second opening in the opened position.

12. (New) The actuator as claimed in Claim 11, further comprising:

a controller (21) controlling the electric motor/pump unit (3), the controller receiving a set point value signal corresponding to a desired pressure within the cylinder/piston unit and an actual value signal corresponding to an actual pressure within the cylinder/piston unit.

13. (New) The actuator as claimed in Claim 11, wherein the dump valve is biased such that the dump valve moves from the first position to the second position before the nonreturn valve moves from the closed position to the opened position.

14. (New) A friction clutch in the drive train of a motor vehicle, the friction clutch comprising:

a clutch plate; and

an actuator having:

a cylinder/piston unit generating a contact pressure against the clutch plate;

a reversible electric motor/pump unit (3) selectively providing a pressure medium;

and

a self-regulating valve unit (2) coupling the cylinder/piston unit and the reversible electric motor/pump unit such that the friction clutch is controlled by actuating the motor/pump unit (3), the self-regulating valve unit (2) having

a dump valve (8;8';28;38) having a sleeve (10;10') and a spring-assisted slide (12;12';32) disposed within the sleeve, the dump valve further having a first opening (11;11'), through which pressure medium from the cylinder/piston unit (1) can flow to a sump, the spring-assisted slide (12;12';32) being movable between a first position, in which it exposes the opening (11;11'), and a second position, in which it conceals the opening (11;11'), the spring-assisted slide being spring biased in to the first position to permit the flow of pressure medium from the cylinder/piston unit to the sump when the reversible electric motor/pump unit is deactivated, the spring-assisted slide being positionable in the second position in response to positive pressure of the pressure medium from the reversible electric motor/pump unit and positionable in the first position in response to negative pressure of the pressure medium from the reversible electric motor/pump unit; and

a nonreturn valve (9;29) disposed between the reversible electric motor/pump unit (3) and cylinder/piston unit (1), the nonreturn valve permitting a fluid flow to take place only in the direction from the reversible electric motor/pump unit (3) to the cylinder/piston unit (1).